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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/312,479	05/17/1999	ROBERT J. HENNICK	283_237.10CPA	2665

20874 7590 01/08/2003
WALL MARJAMA & BILINSKI
101 SOUTH SALINA STREET
SUITE 400
SYRACUSE, NY 13202

EXAMINER

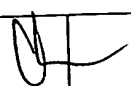
LUU, THANH X

ART UNIT	PAPER NUMBER
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2878

DATE MAILED: 01/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/312,479	Applicant(s) HENNICK ET AL.
	Examiner Thanh X Luu	Art Unit 2878 

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 June 2002.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 and 45-108 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37 and 45-108 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

This Office Action is in response to amendments and remarks filed June 28, 2002. Claims 1-37 and 45-108 are currently pending.

Claim Objections

1. Claims 1 and 31 are objected to because of the following informalities:

In claim 1, "said optical and image sensor assemblies" lacks proper antecedent basis.

In claim 31, "said at least one solderable surfaces" lacks proper antecedent basis.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 26-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 26, it is unclear what "pin o hole" refers to. Furthermore, "said pin and said hole" lacks proper antecedent basis. Applicant has only referred to a pin or a hole, in the alternative. Lastly, it is unclear in its give context for a pin to receive in surrounding but not engaging a corresponding "pin o hole."

Claims 27-31 are indefinite by virtue of their dependency on an indefinite claim.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1 and 82, as understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Masuko et al. (U.S. Patent 5,023,447).

Regarding claims 1 and 82, Masuko et al. disclose (see Figure 2) a method for mounting an optical subassembly (35) of an optical reading device to an image sensor subassembly (33) of an optical device, the method comprising the steps of: moving the optical subassembly and the image sensor subassembly in proximity to with one another; and soldering (at 32) the optical and image sensor subassemblies together using a solder material, wherein at the time of the soldering step there is no contact between the optical subassembly and the image sensor assembly that prevents free movement of the optical subassembly and the image sensor subassembly in either of a

vertical, a horizontal direction or normal directions (left, right or up). That is, there are no clamps or clips that impede the movement of the subassemblies with respect to one another, thus, the subassemblies are free to move in three dimensions at the time of the soldering.

6. Claims 1, 2, 7, 8, 80 and 82, as understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Wise et al. (U.S. Patent 5,100,479).

Regarding claims 1, 2, 7, 8, 80 and 82, Wise et al. disclose (see Figure 1) a method for mounting an optical subassembly (12) of an optical reading device to an image sensor subassembly (10) of an optical device, the method comprising the steps of: moving the optical subassembly and the image sensor subassembly in proximity to with one another; and soldering (at 16) the optical and image sensor subassemblies together using a solder material, wherein at the time of the soldering step there is no contact between the optical subassembly and the image sensor assembly that prevents free movement of the optical subassembly and the image sensor subassembly in either of a vertical, a horizontal direction or normal directions (left, right or up). That is, the subassemblies are free to move in three dimensions at the time of the soldering. Wise et al. also disclose (see Figure 1) forming a solderable material (26) on the optical subassembly. The material (26) provides an irregular configuration (raised from element 10) having an increased surface area as claimed. Wise et al. also disclose the at least one solderable surface is a pin (14) with a substantially uniform diameter.

7. Claims 26-29 and 31, as understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Kawaguchi (U.S. Patent 5,171,985).

Regarding claims 26-29 and 31, Kawaguchi discloses (see Figure 6) an image sensor subassembly comprising: a substantially rigid member (molding 9 or base 12); an image sensor chip (within 9; element 2, see Figure 2) disposed on the substantially rigid member; a solderable surface formed on the substantially rigid member consisting of a hole (in 12) or pin (5-1 or 5-2 on 9) for receiving in surrounding but not engaging relationship a pin (5-1 or 5-4) or a hole (in 12); and a solder material (51) disposed between the pin and hole. Kawaguchi further discloses (see Figure 6) the pin is substantially uniform in diameter. Kawaguchi also discloses (see column 4, lines 20-25) four solderable surfaces (holes for 5-1, 5-2, 5-3 and 5-4) formed about a periphery of the image sensor. The area around the hole inherently contains an irregular configuration.

8. Claims 59, 61-64, 66, 68-71, 89-92, as understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Kanaya et al. (U.S. Patent 5,155,401).

Regarding claims 59, 61-64, 66, 68-71 and 89-92, Kanaya et al. disclose (see Figure 15) an imaging device comprising: an image sensor subassembly including an image sensor (33) mounted on a printed circuit board (35); a substantially rigid optical subassembly, the optical subassembly including an optical element (an aperture or reflecting member in disk 32) disposed on a substantially rigid member (the disk); at least one solderable surface formed on either of the printed circuit board or optical subassembly defining at least one solder receiving interface (28, 29) between the printed circuit board and the optical subassembly; and solder material for bonding the subassemblies disposed at the at least one solder receiving interface (see column 11,

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lines 20-24). Kanaya et al. further disclose (see Figure 15) the optical element having a single receive optical axis. The housing inherently provides a handle. Kanaya et al. also disclose (see Figure 15) the at least one solderable surface is made in an irregular configuration or a pin (28, 29), wherein the pin has a substantially uniform diameter. The circuit board further has holes or through-holes (see Figures 9-11).

9. Claims 13, 15, 18, 23, 24, 32, 33, 35, 37, 46, 47, 49, 52, 53, 55, 57, 83, 86-88, 95, 96, 98, 101-103, 105 and 106, as understood, are rejected under 35 U.S.C. 102(e) as being anticipated by Kropp (U.S. Patent 5,902,997).

Regarding claims 13, 15, 18, 23, 24, 32, 33, 35, 37, 46, 47, 49, 52, 53, 55, 57, 83, 86-88, 95, 96, 98, 101-103, 105 and 106, Kropp discloses (see Figure 4) a method for mounting an optical subassembly to an image sensor subassembly, the method comprising the steps of: forming at least one solderable surface on at least one of the optical and image sensor subassemblies (see column 5, lines 14-16); inherently moving the optical subassembly (44, 45) in proximity with the image sensor subassembly (40) to define an interface delimited by at least one solderable surface of the optical subassembly or the image sensor subassembly; and soldering the optical subassembly and the image sensor subassembly together at the interface (see column 5, lines 13-16 and lines 45-53), wherein the subassemblies can be moved freely (in a vertical or horizontal direction) relative to one another before the soldering step. That is, the instant before the two subassemblies touch and prior to soldering, the subassemblies can be moved freely in a vertical or a horizontal direction. Kropp also discloses (see Figure 4) a method for mounting an optical subassembly of an optical reading device to

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an image sensor subassembly, the method comprising: inherently moving the optical subassembly (44, 45) and the image sensor subassembly (40) in proximity to one another; aligning the subassemblies; and without a portion of the image sensor subassembly being in contact with a portion of the optical subassembly in contact, soldering the subassemblies together. That is, only the solder bumps and solderable surface touch. Kropp also discloses (see Figures 3 and 4) an optical subassembly comprising: a substantially rigid member (44); an optical element (45) disposed on the substantially rigid member; and a solderable surface (40) formed on the substantially rigid member (see also column 5, lines 14-16 and lines 45-53). Kropp further discloses (see Figure 4) the solderable surface consisting of a pin (46) having a substantially uniform-diameter body. That is, compared to the width of the subassembly, the pin has a substantially uniform-diameter. Kropp further discloses (see column 5, lines 14-16) forming a solderable surface (40, 52) on at least one of the optical or image sensor subassemblies. Also, Kropp discloses (see column 5, lines 47-50) plating (metallizing) a solderable material (metal) onto a non-solderable material (40). Kropp also discloses (see Figure 4) making the solderable surface (40 or 52) in an irregular configuration having an increased surface area per unit three dimensional space relative to that of a smooth surface. In addition, Kropp discloses (see Figure 4) the solderable surface is made in the configuration of a through-hole (52). Further, Kropp discloses (see Figure 4) forming a solderable pin (46) on one of the subassemblies and making a hole (48) for receiving the pin on the remaining of the subassemblies. Further, the optical elements of Kropp are inherently aligned with imaging elements of the image sensor subassembly

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(see Figure 3).

10. Claims 73, 74, 76-78, 93 and 94, as understood, are rejected under 35 U.S.C. 102(e) as being anticipated by Christensen (U.S. Patent 5,753,908).

Regarding claim 73, 74, 76-78, 93 and 94, Christensen discloses (see Figures 1, 4 and 5) an optical reading device comprising: an optical and image sensor assembly including an image sensor subassembly including an image sensor (52) mounted on a substantially rigid planar member (50), an optical subassembly (80, 10) including an optical element (22, 20, 18, 16) disposed on a substantially rigid member (frame or housing), at least one solderable surface (see Figures 4 and 5) formed on either of the optical subassembly or the substantially rigid planar member defining at least one solder receiving interface between the substantially rigid planar member and the optical subassembly (see Figure 1), solder material for bonding (see column 5, lines 20-30) the subassemblies disposed at the at least one solder receiving interface, and a housing (see Figure 1), the optical and image sensor assembly being disposed in the housing. Christensen further discloses (see Figure 1) the housing partially defines a feed path and wherein the device is a document reading device for reading indicia from documents transported along the feed path. Christensen also discloses (see Figures 4 and 5) the at least one solderable surface is made in an irregular configuration, a through-hole or a pin with a substantially uniform diameter.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 14, 16, 17, 19-22, 25, 34, 36, 48, 50, 51, 54, 56, 58, 84, 85, 97, 99, 100, 104, 107 and 108 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kropp.

Regarding claims 14, 16, 48, 50, 97 and 99, Kropp discloses soldering. Kropp does not disclose overmolding non-solderable material onto solderable material or insert molding solderable material in non-solderable material. However, the manner in which solderable material is disposed onto a non-solderable material is well known and is a matter of design choice. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to overmold or insert mold in the method of Kropp in order to obtain a better solderable surface.

Regarding claims 17, 51 and 100, Kropp discloses (see Figure 4) making a frame (44) for the optical subassembly. Kropp does not disclose the frame comprising essentially solderable material, but the protrusions (40) are solderable material. However, the percentage of solderable material that the frame consists of is a matter of design choice. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide a frame of solderable material in order to obtain a better bond.

Regarding claims 19-22, 34, 36, 54, 56, 84, 85, 104 and 108, Kropp discloses (see Figure 4) a pin (40) and through-hole (52) type configuration. Kropp also discloses (see Figure 4) the solderable surface is in the configuration of a pin (40) having a body

substantially uniform in diameter. That is, compared to the width of the subassembly, the pin has a substantially uniform-diameter. However, the specific shape of the pin, as a threaded screw is a simple matter of design choice. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to thread the pin in order to provide a tighter and stronger bond. Further, it is a matter of design choice which surface is the pin and which is the hole.

Regarding claim 107, the pin and hole of Kropp fits snugly. Kropp does not specifically disclose the pin small than the hole. However, the size of the pin and hole is a matter of design choice. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to make the pin smaller than the hole in order to allow for adjustments as desired.

Regarding claims 25 and 58, Kropp does not disclose aligning using a video monitor which displays an output indicative of an output of an image sensor. However, it is notoriously well known in the art to use vision systems to aid in the alignment of elements since vision systems allow for magnification of images. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to align using a video monitor based on an output of an image sensor in the method of Kropp to provide precise alignment.

13. Claims 60, 65, 67 and 72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanaya et al.

Regarding claims 60 and 67, Kanaya et al. disclose a housing encapsulating the assembly. Kanaya et al. do not disclose the device partially defining a feed path.

However, the type of device in which the assembly is mounted is a matter of design choice. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to mount the assembly of the apparatus of Kanaya et al. on any device to partially define a feed path as desired in order to provide correct alignment.

Regarding claims 65 and 72, Kanaya et al. disclose a pin as the solderable surface. Kanaya et al. do not disclose the solderable surface as a threaded screw. However, the choice of a threaded screw is simple. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to thread the pin to form a threaded screw in order to provide a tighter and stronger bond.

14. Claims 75 and 79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Christensen.

Regarding claim 75, Christensen discloses the device as part of an optical scanner. Optical scanners inherently have handles. Christensen does not disclose the scanner as a hand held optical reader. However, It would have been obvious to a person of ordinary skill in the art at the time the invention was made to implement the method to hand held devices in order to provide easy alignment for portable devices. Furthermore, the type of device in which the assemblies are part is a matter of design choice since it does not affect the core structure of the invention.

Regarding claim 79, Christensen discloses a pin as the solderable surface. Christensen does not disclose the solderable surface as a threaded screw. However, the choice of a threaded screw is a simple. It would have been obvious to a person of

ordinary skill in the art at the time the invention was made to thread the pin to form a threaded screw in order to provide a tighter and stronger bond.

15. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawaguchi.

Regarding claim 30, Kawaguchi discloses the claimed invention as set forth above. Kawaguchi does not specifically disclose the solderable surface is a threaded screw. However, it is well known in the art that threaded screws allow for better bonding. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide a threaded screw as claimed in the apparatus of Kawaguchi to improve the bonding strength.

16. Claims 3-6 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wise et al.

Regarding claims 3-6, Wise et al. disclose the claimed invention as set forth above. Wise et al. do not specifically disclose the technique in which a solderable material is formed. However, the different techniques as claimed are notoriously well known in the art. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the conventional techniques to form a solderable material as claimed in the apparatus of Wise et al. to provide consistent results as desired.

Regarding claim 45, Wise et al. disclose the claimed invention as set forth above. Wise et al. do not specifically disclose aligning using a video monitor which displays an output indicative of an output of an image sensor. However, it is notoriously well known

in the art to use vision systems to aid in the alignment of elements since vision systems allow for magnification of images. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to align using a video monitor based on an output of an image sensor in the method of Wise et al. to provide precise alignment.

17. Claims 9-12 and 81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wise et al. in view of Kawaguchi.

Regarding claims 10, 11, 12 and 81, Wise et al. disclose the claimed invention as set forth above. Wise et al. do not specifically disclose a pin or a hole or through-hole as claimed. Kawaguchi teaches (see Figure 6) a pin and hole configuration for soldering. Thus, Kawaguchi recognizes that the pin and hole aids in a more precise alignment of subassemblies. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use a pin and hold configuration as claimed for soldering the subassemblies of Wise et al. in view of Kawaguchi to aid in the alignment of the subassemblies and improve throughput in manufacturing the apparatus.

Regarding claim 9, Wise et al. in view of Kawaguchi discloses the claimed invention as set forth above. Wise et al. and Kawaguchi do not specifically disclose the solderable surface is a threaded screw. However, it is well know in the art that threaded screws allow for better bonding. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide a threaded screw

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as claimed in the apparatus of Wise et al. in view of Kawaguchi to improve the bonding strength.

Response to Arguments

18. Applicant's arguments filed June 28, 2002 have been fully considered but they are not persuasive.

Applicant's arguments with respect to claims 1, 26 and their dependent claims have been considered but are moot in view of the new ground(s) of rejection.

Regarding claims 13 and its dependent claims, Applicant asserts that the claim is overcomes the prior art for the same reasons as in claim 1. However, claim 13 does not include the same language as claim 1. Examiner maintains that at the instant prior to the time the two subassemblies are soldered, the subassemblies can be freely moved in any direction.

Regarding claims 32 and its dependent claims, Applicant asserts that Kropp does not disclose a substantially uniform-diameter pin. Examiner maintains that the bump of Kropp is substantially uniform in diameter. "Substantial" is a relative term. As stated above, when compared to the width of the entire subassembly, the pin (its width) has a substantially uniform diameter as claimed.

Regarding claims 46 and its dependent claims, Applicant asserts that the subassemblies do not come into contact with each other and therefore Kropp does not read on the invention. As set forth above, when the subassemblies are brought together into alignment or in close proximity, before soldering, there is no contact between the subassemblies as claimed.

Regarding claims 59, 66 and their dependent claims, Applicant has added the language "a substantially rigid optical subassembly." Applicant asserts that the subassembly of Kanaya et al. is not substantially rigid because it moves. As understood, the term "rigid" means not flexible. Even though parts of the optical subassembly of Kanaya et al. rotate, it remains substantially rigid or not flexible as claimed. Applicant further asserts that Kanaya et al. does not anticipate the claimed invention because the optical subassembly is moveable with respect to the image sensor assembly. However, an immovable feature of the subassemblies with respect to each other is not claimed.

Regarding claims 73 and its dependent claims, Applicant asserts that since the solderable material is not between the two subassemblies, the claims overcome the prior art. Applicant's assertion is incorrect. The solderable material includes at least the pins in Figure 4 of Christensen and the solderable material thus is between the two subassemblies.

Regarding claims 95 and its dependent claims, Applicant asserts that in the claimed invention no portion of the image sensor subassembly comes in contact with a portion of the optical subassembly. As set forth above, "a portion" of the respective image sensor and optical subassemblies do not come into contact. That is, any portion of the respective subassemblies that do not contact each other reads on the claim language.

Thus, as set forth above this rejection is proper.

Conclusion

19. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh X. Luu whose telephone number is (703) 305-0539. The examiner can normally be reached on Monday-Friday from 6:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta, can be reached on (703) 308-4852. The fax phone number for the organization where the application or proceeding is assigned is (703) 308-7722.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

txl
January 6, 2003


Que T. Le
Primary Examiner